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DESIGN AND CRAFTS IN THE HIGH SCHOOL¹

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An encouraging sign of progress in the evolution of art instruction in our schools is the growing conviction that the principles of design should enter into consideration in the treatment of every division of the subject. Within the last few years a very decided movement has been made toward a closer union between teachers of art and teachers of manual training. Each has felt the necessity of a better understanding of the problems of the other. The art teacher realizes the advantage of a concrete illustration of principles in the making of interesting articles from various materials, and through this realization has come to him the necessity for a knowledge of construction; while the teacher of manual training has found that what is known as the art principle has infused fresh vitality into his work, and has made him dissatisfied with the strictly utilitarian and industrial treatment of the question. While co-operation of these forces is felt by all to be of mutual benefit, there are enthusiasts who claim for manual training the larger and more important place. They feel that only those exercises or art principles which can be worked out in material forms will justify an expenditure of the time and energy of the pupil. In their newly awakened interest in the making of things they are apt to forget that the end and aim of manual training

¹ Read before the Eastern Art Teachers' Association at Trenton, N. J., May 5, 1905.

is not the production of beautiful articles, but the improvement of human character, the spiritual enlightenment of the individual, and the uplifting of a nation in the evolution of the races of men.

On the other hand, there are those who feel that the art side is the more important phase of the question, and who advocate only such use of concrete and material forms as will exemplify or illustrate principles of a purely subjective nature; who feel that general art appreciation, which includes fine taste, good judgment, and a keen discrimination between good and bad in one's surroundings, can be reached only by the conscious, definite study of the laws of beauty; who believe in the everlasting dominance of mind over matter. With the advocates of this class, it is a generally accepted theory that the chief mission of art in the school instruction of today is to stimulate the imagination and to provide carefully graded steps for its development, in this way giving the child, by the time he reaches the end of the school period, certain powers of insight and projection, as well as a certain facility of expression. It is the trained imagination which enables a man to project his mind into the future, and to read the signs of the times as a prophecy of what is to come; it is the trained imagination which has enabled the captains of industry to foresee the possibilities of trade, and has equipped them to meet conditions which have inevitably arisen. It is the trained imagination which has led the successful general to fight his battles many times before active engagement with the enemy. In imagination he planned the advance, the flank movement, the feint; in imagination he considered the advisability of a retreat, or even the possibility of defeat. The burglar and the gambler are examples of artists or artisans with imaginations trained, not under the ethical influences of art and high ideals, yet keen and active in the planning of the daring robbery or the successful *coup d'état*. The artist but transfers to canvas the image in his mind; the clearer the image, the easier will be the transfer. The craftsman brings his imagination to bear upon the raw material before him, and sees the finished product. Cultivated imagination is the great asset in the educational fortune of an individual, and toward it may well be directed all the educational forces of which we are the earnest and zealous, if sometimes the mistaken, directors.

A course of art study which takes into consideration the child's surroundings, trains his observational powers, proceeds to the study of the laws of beauty as substantiated by the art of the world, and leads to creative work, cannot fail to offer stimulus to the imagination. A stock of information regarding environment and surroundings in the world about us must be accumulated by the study of the various topics covered in a well-planned course in drawing for the grades. In the high school, where a certain amount of intellectual strength and reasoning ability may be expected, more emphasis should be given to exercises of a subjective nature; and it is this subjective work that feeds the intellectual and spiritual man, and fosters idealism. To imaginative thought must of course be added, first, will-power—the determination to carry out the beautiful images of the mind; and, second, a knowledge of technique sufficient to enable one properly to express that image in visible or concrete terms. In this way does the individual come to the fullest realization of his powers, and to the fullest expression of his best self. To express this idea in everyday terms, we might say that the logical order is, first, the accumulation of knowledge of forms; second, the use of this experience or information in a subjective way, by means of exercises along well-defined lines, in the study of composition and the laws of beauty; and, lastly, the visible expression of the idea or image in actual composition or construction.

An absolutely essential element in the arts and crafts of the high school is a knowledge of the laws governing the disposition of line, area, and color, as manifested in nature, in painting, in sculpture and architecture, in decoration, and in the worthy crafts work of all ages. Nature furnishes a never-failing storehouse of suggestion, and designers of nearly all ages have gone to her for material. If we search the Egyptian records, we find the lotus, the hawk, the bull, the human figure, and many other forms arranged as designs suitable for specific purposes. The Persians also went to nature, and their art differs from that of the Egyptians only as the individuality and the environment of the Persians differed from the individuality and environment of the Egyptians. It is plain that the Greeks found in nature the acanthus, the rosette, the suggestion for the egg and dart repeat, and their numerous animal and figure forms. The

Byzantine, the Romanesque, the Gothic, the Celtic, the Renaissance, the Chinese, and the Japanese styles, all show the unmistakable influence of nature. It would seem well to follow the suggestions which these historic styles have given us.

In any work of art, whether graphic or concrete, we must deal with such terms as lines, areas, and color. Under the head of line may be cited a number of conditions, an understanding of which is essential to a problem in construction as well as to a problem in art. For example: There are but two kinds of lines, straight and curved, and beauty or ugliness results from their use or combinations. In the crafts, structural lines should remain unbroken, as far as possible, as shown in Fig. 1. Any violation of this principle will result in a lack of dignity, or a feeling of unrest, as in Fig. 2. The breaking up of structural lines always indicates the decadence of a style.

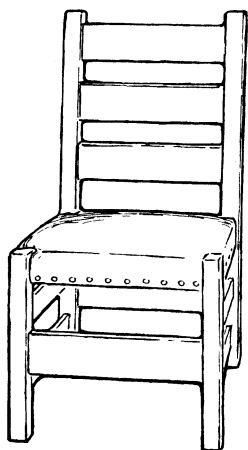


FIG. I.

Again: All lines in ornament should be related, not only to each other, but to the structural lines of the object decorated. Fig. 3 is a violation of this law, for the units of the ornament have no relation of beauty either to each other or to the structural lines of the bracket. Fig. 4 shows that one simple shape—the leaf—has been selected from the plant growth, and has been repeated in a simple rhythm; each unit harmonious with its neighbor, and also with the contour of the bracket.

In a similar way, we may see that areas and masses are important elements of design, and are subject to similar governing laws. We know that paintings, designs for ornament, and constructed objects are made up of large, medium, and small areas and shapes (see Fig. 5). The large areas produce an effect of restfulness and repose, as do the bass viol and

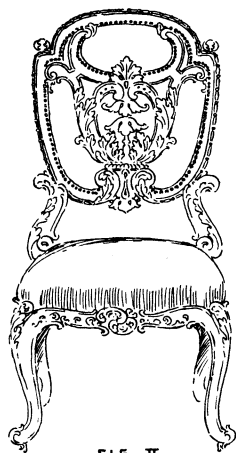
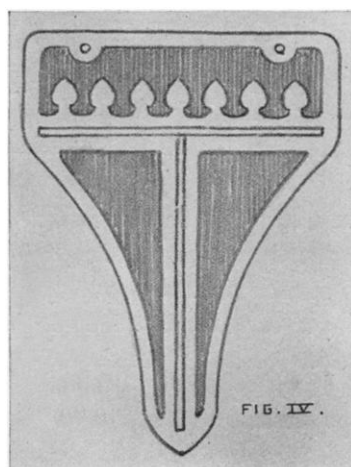
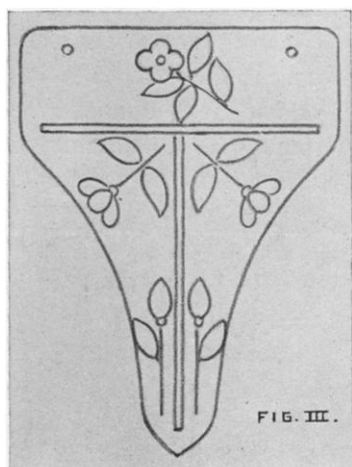


FIG. II.

the bassoon in orchestral music; while the small shapes, like the violins, flutes, and clarionets, produce melody, sparkle, and movement. If, as in Fig. 6, there is a preponderance of large areas, monotony and heaviness result. If, on the other hand, too many small areas are evident, there is an effect of disquiet, fussiness, unrest (see Fig. 7).

Color, also, is under the restriction of governing laws, and much of the poor work seen in our high-school exhibits of arts and crafts



comes from the lack of an understanding of a few principles, which may be briefly cited. Pure and intense colors are sparingly used, even by nature herself. We are surrounded by a world of color, but grayed or broken colors are vastly in the majority. Rare exceptions are found in isolated plant forms and in the colors of the sunset sky. The very atmosphere acts as a screen or veil, so that the eye receives an impression of grayed color from objects of intense color which are but a few rods distant. With the exception of jewels and stained glass, we do not use intense reds or greens, for instance, in our dress or house furnishings. Neither is the use of colors in full intensity consistent with the use of such materials as wood, metal, cloth, or leather. In the crafts, therefore, intense colors should

be used only in small quantities, in proportion to a large amount of grayed color.

When complementary colors are present in a design, they seem to enhance each other. For instance, yellow is strengthened or accented by the presence of violet, and a gray-blue is intensified by the nearness of its complementary, gray-orange.

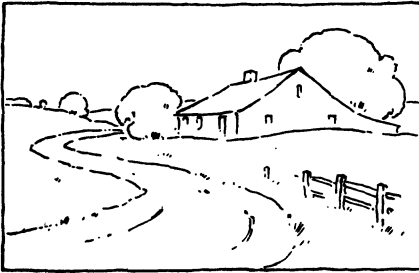


FIG. V.

in the composition. This dominant color may itself be a gray, as when, on a heavy gray day, gray affects all colors of a landscape. Often at sunrise or in the early morning some such tint as a gray-red-violet may seem to color the atmosphere and hang as a rosy veil over all things on the earth. In the

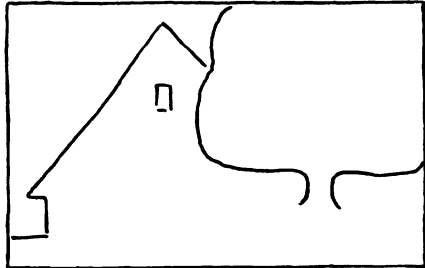


FIG. VI.



FIG. VII.

Dominant harmony is another color condition often employed by painters, and is entirely practical and safe to use as a color condition in the crafts. It is obtained when some one dominating color enters into every color used

crafts, this effect of dominant harmony is obtained by the blending of one color or stain with all the others. When this is done, a certain unity is assured in the result.

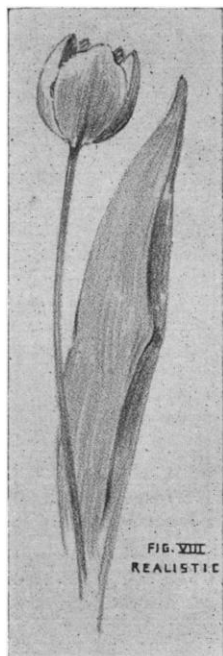
In applying art principles to construction, a practical suggestion may be made as to the use of ornament. The

beauty of a constructed object should depend, as far as possible, upon good proportion, structural lines, and the use of fine color.

Ornament should be sparingly used. The beautifully grained woods frequently employed are sufficiently decorative in themselves, and can seldom be improved by the addition of carving, no matter how excellent in technique this carving may be. Let us remember that over-decoration, wherever manifested, is a sure sign of ignorance.

It is only a knowledge of art that leads us to appreciate the beauty of simplicity.

In the use of decorative ideas, students should never be restricted to one source. The style or fashion known as *l'art nouveau* is certainly legitimate, but it is only one way, and should never be allowed to crowd out the influence of nature, in the search for ideas. Observe how the Egyptians modified nature forms about them, and adapted these forms to fit the conditions of any particular problem. The beauty of Japanese art consists in the subjective use of natural forms, and in their wonderful appreciation of the laws governing the use of lines, areas, and colors. How cleverly and how fearlessly they made nature serve them, in the develop-

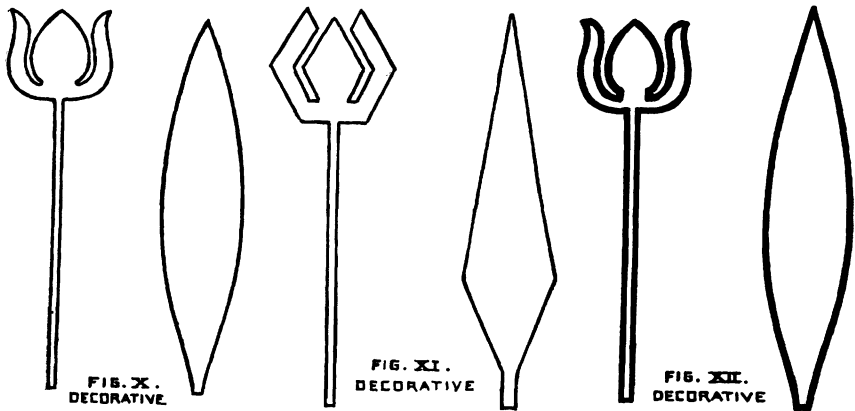


ment of decorative forms from the purely realistic! It is a fine example of the ideal seen in and through the real. It is the triumph of spirit over materialism. Even the American Indian saw in the pine tree, the flowing stream, the range of mountains, the zigzag lightning, symbols that represented his ideals, and he used these symbols in his art as a language to express his thoughts.

The processes of these workers should be explained to students in the high schools in order to lead them to sympathy with and understanding of these designers of another age. Students are easily



interested in observing the evolution of a flower form, for instance, from the purely realistic to the symbolic or abstract. In Fig. 8 the tulip is pictured just as it appears, the line being qualified so as to express the tenderness of the petals, the firmness of the stem, the leathery quality of the leaf, etc. Accidental turning of the parts is shown, and all of the elements which might give a true representation of the plant as it grows are employed. In Fig. 9 is shown a semi-realistic treatment of the same plant. Here the unnecessary parts have been to some extent eliminated, and the vital parts are kept.



While the truth of growth has nowhere been violated, the realistic interpretation has given place to a decorative quality in line. This is the treatment which is followed so largely in the Japanese and Chinese designs; and the use of such designs as this is permissible in the decorative crafts, while the use of realistic forms as decorations is always to be avoided.

Figs. 10, 11, 12, and 13 show various treatments of the decorative or conventional use of plant form. While the origin of the motive is apparent in each, the realistic elements have been very much subordinated, and the design intention is at once apparent. Enough of the spirit of the tulip is kept to afford one who seeks the pleasure of discovery. In Fig. 10 the curved line was retained; in Fig. 11 straight lines instead of curved were used; in Fig. 12 the curved line of Fig. 10 was widened to such an extent that it became an important design factor. In Fig. 13 a wide line was placed around

the motive, leaving a pathway of light between the band and the shape, somewhat in the spirit of a stencil effect. Such a treatment tends to loosen the design, to break up an effect which otherwise might be too heavy. It carries pathways of background color through the unit without destroying the mass. Fig. 14 is symbolic. We can

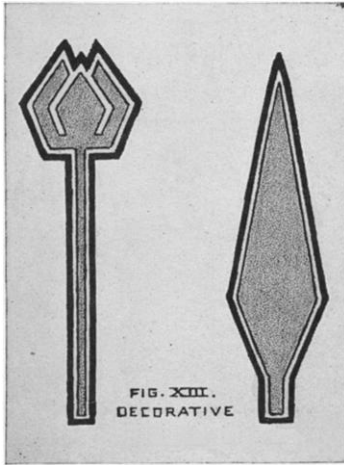


FIG. XIII.
DECORATIVE

still trace a resemblance to the tulip, but a slight readjustment of the parts would destroy all traces of a likeness, and would result in an entirely abstract unit.

These sketches only serve as illustrations of some of the ways in which any form or figure from nature or our surroundings can be changed to meet limitations imposed by one law of design—fitness to the purpose. The adaptation of natural forms to meet this condition is what is generally known as conventionalization, and means simply

the adjustment of lines, areas, and colors to fit certain existing limitations.

In pursuance of these ideas, thus briefly mentioned, there should be, in a well-balanced high-school course in art, sufficient emphasis given to the principles of pure design to assure the development of imagination, of judgment, and of creative ability. There should be numerous exer-

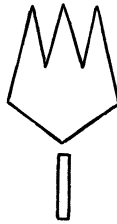


FIG. XIV.
SYMBOLIC

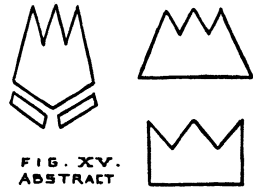


FIG. XV.
ABSTRACT

cises given for the elucidation of these principles, many of which it would not be possible to carry out in actual construction. The time at the disposal of the pupil, the cost of material and equipment, and the necessity for a choice of the really vital elements must all enter into the question of how much time shall be devoted

to the making of things. But enough of the crafts work should be done to give the students some conception of the close relation of art to construction in the big industries of life with which he is in daily touch; so that the truth of this maxim may come home to him :

“Life without industry is guilt;
Industry without art is brutality.”